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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/577,992

06/16/2006

Kikuo Yamada

HOS-73

4522

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09/17/2009

EXAMINER

MCDONALD, SHANTESE L

ART UNIT

PAPER NUMBER

3723

MAIL DATE

DELIVERY MODE

09/17/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/577,992	<b>Applicant(s)</b> YAMADA, KIKUO	
	<b>Examiner</b> SHANTESE MCDONALD	<b>Art Unit</b> 3723	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on 26 May 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☐ Claim(s) 1-5,9-14,16-20 and 22-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1-5,9-14,16-20 and 22-26 is/are rejected.
- 7) ☐ Claim(s) 27-30 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5,9-14,16-20 and 22-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanaka (6,968,591), in view of Busam et al.

Tanaka (6,968,591) teaches a cleaning tool sheet comprising fiber bundles, 3,4,6, laminated on one side of a base sheet, 5, wherein the base sheet and the fiber bundles have thermal fusibility, wherein central parts in the direction of flow of the fiber constituting the fiber bundles are joined by a central joining part, 7, continuously formed in the central part of the base sheet and joined at a joining part, 34, formed on a parallel line between the central joining part and two end edges parallel there with, wherein the two ends in the direction of flow of the fibers are not joined to the base sheet, (col. 5, line 64-co1.6, line 6). Tanaka (6,968,591) also teaches a holding sheet comprising two

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non-woven sheets bounded together to define a holding part therein, the holding sheet bonded to a side of the base sheet opposite the fiber bundles, (col. 9, lines 36-50), the holding sheet comprising two bag form holding parts, 22, (col. 8, lines 26-37), a joining line, 8, positioned along a respective edge of the space provided by the holding sheet for receiving a holding member, and another line positioned along an edge of another space for receiving a holding member, (col. 6, lines 35-54. fig. 2), holding sheets further comprising a color part indicating a location for insertion of an insertion part of a cleaning tool and further comprising a pattern of surface irregularities, 24, indicating a location of insertion of a cleaning tool, (col. 9, lines 40-44). Tanaka (6,968,591) teaches all the limitations of the claims except for the joining line along the respective edge of the space provided by the holding sheet and the another line positioned along an edge of another space being spot-form joining lines that don't overlap in the direction of flow of the fiber bundles, the thickness of the fibers being 1 to 18 denier, and the holding sheet comprising a single non-woven sheet folded in two and heat sealed to a side of a base sheet opposite the fiber bundles. Busam et al. teaches a joining line being a spot formed joining line, 630, that don't overlap, (col. 11, lines 10-18). It would have been obvious to one having ordinary skill in the art at the time the invention was made to replace the joining line 34, of Tanaka (6,968,591), with for joining line being a spot form line that doesn't overlap, as taught by Busam, as an alternate form or joining the fibers and sheets, since Tanaka teaches that the sheets and fibers can be joined by various methods, (col. 8, lines 48-54). It would have been further obvious to provide the tool of Tanaka (6,968,591) with the fiber bundles having a thickness of the

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fibers being 1 to 18 denier, as a matter of obvious design choice. It would have been further obvious to provide the tool of Tanaka (6,968,591), with the holding sheet comprising a single non-woven sheet folded in two and heat sealed to a side of a base sheet opposite the fiber bundles, since Tanaka teaches fusing two sheets to form a holding part, and it is obvious to provide two sheets, or fold on sheet in half to form a holding part.

### ***Allowable Subject Matter***

Claims 27-30 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Response to Arguments***

Applicant's arguments filed 5/26/09 have been fully considered but they are not persuasive.

The Applicant argues that the Tanaka and Busam et al. references does not teach a first portion of the fibers in the fiber bundle being bonded only by the central joining part and a second portion of the fibers in the fiber bundle is bonded by the spot-form joining parts and by the central joining part. The Applicant also argues that Tanaka discloses only join line 34, that spans the entire length of the sheet, and that there is no motivation to combine the Tanaka and Busam references. The Examiner

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disagrees. The Tanaka reference teaches bonding fibers bundles to a base sheet using join lines 34, which is a continuous bond line. Busam teaches a method of bonding fibrous materials using bonding patterns. Busam teaches that bonding pattern lines can be, but do not need to be solid lines, such as solid embossing lines as depicted in fig. 5, but can consist of a secondary bonding pattern such as a plurality of dots or points of a certain size arranged such that the distance between adjacent dots within the secondary pattern is significantly different than the center to center distance between to adjacent non-intersecting primary pattern lines, (col. 11, lines 10-18). Therefore one can utilize the teaching of the various bonding patterns, of Busam to replace the solid line, 34, of Tanaka, and when this is done there will be some space in between the dots or points that will not be bonded by the spots or points, and in this instance a first portion of the fibers in the fiber bundle will be bonded only by the central joining part and a second portion of the fibers in the fiber bundle will be bonded by the spot-form joining parts and by the central joining part.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SHANTESE MCDONALD whose telephone number is (571)272-4486. The examiner can normally be reached on 8:00 a.m. - 4:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Hail can be reached on (571) 272-4485. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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S.L.M.

August 31, 2009

/Joseph J. Hail, III/

Supervisory Patent Examiner, Art Unit 3723